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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GARY DAVIS, SHANTARAM NARAYAN NAIK,
KIRAN ARUNKUMAR PUTHAMANE,
GEORGE KURIAKOSE, SUMEET JAIN,
VINODKUMAR VASUDEVAN, and PRASHANT PATIL

Appeal 2015-007344
Application 13/234,576
Technology Center 1700

Before ROMULO H. DELMENDO, BEVERLY A. FRANKLIN, and JENNIFER R. GUPTA, *Administrative Patent Judges*.

GUPTA, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

Appellants[2] appeal under 35 U.S.C. § 134(a) from the Examiner's decision finally rejecting claims 2–8, 10–17, 19, 38, and 39. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

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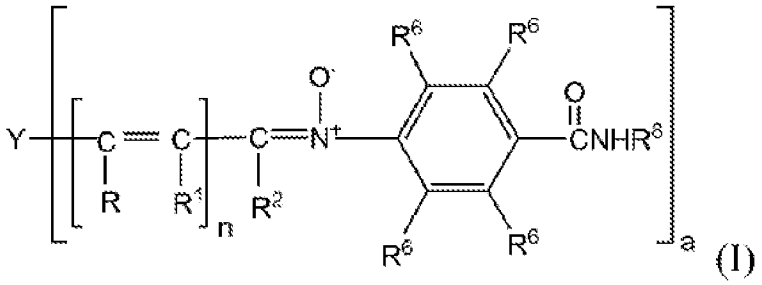
[1] In this decision, we refer to the Final Office Action mailed September 29, 2014 ("Final Act."), the Supplemental Appeal Brief filed July 31, 2015 ("App. Br."), the Examiner's Answer mailed June 1, 2015 ("Ans."), and the Reply Brief filed July 31, 2015 ("Reply Br.").

[2] Appellants identify the real party in interest as SABIC Innovative Plastics IP B.V. App. Br. 2.

Claim 38, reproduced below, is illustrative of the claims on appeal.

38. A method of manufacturing a holographic storage medium, comprising:

mixing a compound according to the formula



(I)

wherein Y is a monovalent or multivalent C_2–C_{30} organic radical; each of R, R^1, and R^2 is independently hydrogen, an C_1–C_8 aliphatic, or a C_6–C_{13} aromatic radical; each R^6 is independently hydrogen, halo, cyano, nitro, a C_1–C_8 aliphatic radical, or a C_6-C_{13} aromatic radical; R^8 is hydrogen, a C_1–C_8 aliphatic radical, a C_6–C_8 cycloalkyl radical, or a C_6–C_{13} aromatic radical; a is an integer of 1 to 4; and n is an integer of 0 to 4,

with a molten thermoplastic polymer binder at a temperature of at least 220°C to form a mixture, and

forming the mixture into the holographic storage medium.

App. Br. 10–11 (Claims Appendix).[3]

[3] Although claims 3 and 16 are not recited in the Claims Appendix at pages 8–11 of the Appeal Brief, which the Examiner points out (Ans. 2), Appellants have not affirmatively canceled those claims, and refers to claims 3 and 16 in their Appeal Brief as being rejected under 35 U.S.C. § 103(a) (App. Br. 5). Thus, we treat those claims as "pending" and subject to all applicable rejections on appeal.

REJECTIONS ON APPEAL

1. Claims 3 and 16 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite;
2. Claims 2–8, 10–17, 19, 38, and 39 stand rejected under § 103(a) as unpatentable over Erben et al., (US 2009/0082580 A1, published Mar. 26, 2009) (hereinafter "Erben '580") in view of Davis et al., (US 2010/0009269 A1, published Jan. 14, 2010) (hereinafter "Davis"), Matsuda (JP 61-118741, published June 6, 1986) (hereinafter "Matsuda"), and Erben et al., (US 2007/0146835 A1, published June 28, 2007) (hereinafter "Erben '835"); and
3. Claims 2–8, 10–17, 19, 38, and 39 stand rejected under § 103(a) as unpatentable over Erben '580 in view of Davis, Erben '835, Matsuda, and further in view of Erben et al., (US 2006/0073392, published April 6, 2006) (hereinafter "Erben '392").

DISCUSSION

Rejection 1

Appellants do not present arguments contesting the Examiner's rejection of claims 3 and 16 under 35 U.S.C. § 112, second paragraph. *See generally* App. Br. 5–7. Consequently, Appellants have waived any argument of error, and we summarily sustain the rejection of claims 5 and 14. *See Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) ("If an appellant fails to present arguments on a particular issue--or more broadly, on a particular rejection--the Board will not, as a general matter, unilaterally review those uncontested aspects of the rejection") and *Manual of Patent Examining Procedure* (MPEP) § 1205.02 (9th ed., Mar. 2014) ("If

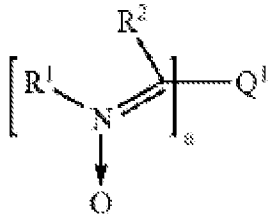
a ground of rejection stated by the examiner is not addressed in the appellant's brief, appellant has waived any challenge to that ground of rejection and the Board may summarily sustain it, unless the examiner subsequently withdrew the rejection in the examiner's answer.").

Rejections 2 & 3

Appellants argue the claims subject to the second ground of rejection as a group. Appellants do not present additional arguments against the Examiner's third ground of rejection. Rather, Appellants rely on the arguments made with respect to the second ground of rejection (App. Br. 6). Accordingly, we select claim 38 as the representative claim on which we focus in deciding this appeal.

Erben '580 discloses a holographic storage medium comprising an optically transparent substrate comprising a photochemically active dye (a dinitrone compound) having structure (I)

(I)



where R^1 is independently at each occurrence a C_1–C_{20} aliphatic radical, a C_3–C_{20} cycloaliphatic radical, or a C_2–C_{30} aromatic radical, R^2 is a C_1–C_{20} aliphatic radical, Q^1 is a C_1–C_{20} aliphatic radical, a C_3–C_{20} cycloaliphatic radical, or a C_2–C_{30} aromatic radical (i.e., a multivalent C_2–C_{30} organic radical), and "a" is an integer from 2 to 100. *Compare* Erben '580 ¶ 11 *with* Spec. ¶¶ 24–25. Erben '580 teaches that the aromatic radical refers to an array of atoms having at least one aromatic group. *Id.* at ¶ 23. The

Examiner finds that the aromatic radical includes 3-aminocarbonylphen-1-yl (*i.e.,* NH_2COPh). Final Act. 3 (citing Erben '580 at ¶ 23).

Appellants argue that Erben '580, Davis, and Erben '835 fail to teach a holographic storage medium comprising a nitrone compound with the $–C(O)–NHR^8$ appended to a phenyl group attached to the nitrone nitrogen as required by claim 38. App. Br. 5; *see also* claim 38 (in which R^8 can be hydrogen).

Appellants' argument does not persuade us of reversible error in the Examiner's rejection because as discussed above, Erben '580 teaches R^1 of its nitrone compound of formula (I) can be a C_2–C_{30} aromatic radical, and the Examiner finds that Erben '580 teaches that the aromatic radical includes 3-aminocarbonylphen-1-yl (*i.e.,* NH_2COPh). Final Act. 3; *see also* Erben '580 ¶ 11 and ¶ 23. Thus, Erben '580 would have suggested to one of ordinary skill in the art a holographic storage medium comprising a nitrone compound with a NH_2COPh group attached to the nitrone nitrogen as required by claim 38.

Appellants argue that the Examiner has not shown a reason for one skilled in the art to choose a nitrone compound with the $–C(O)–NHR^8$ appended to a phenyl group attached to the nitrone nitrogen among the universe of compounds disclosed by Matsuda to use in Erben '580. Although we agree the Examiner may not have established a reason to modify Erben '580's compound 3 based on Matsuda, we are not persuaded of reversible error in the Examiner's rejection because as discussed above, Erben '580 itself would have suggested to one of ordinary skill in the art that the aromatic radical on its nitrone compound could be a $–C(O)–NHR^8$ group.

Appellants' argument that their Specification provides evidence that mono-substituted amide groups provide the nitrone compound with an unexpected increase in thermal stability, and such evidence is indicative of patentability is not persuasive. App. Br. 6 (referring to Table 4 (Spec. ¶ 112). The disclosure in Appellants' Specification does not identify the results as unexpected. On the record before us, only the attorney who authored the Appeal Brief states that the evidence in the Specification is unexpected. Attorney argument, however, is inadequate to establish unexpected results. *See In re Geisler*, 116 F.3d 1465, 1470–71 (Fed. Cir. 1997) (reiterating that unexpected results must be established by factual evidence and that an attorney's statement is insufficient to establish unexpected results). Moreover, Appellants have not established that the results obtained with inventive compound 1 are representative of the results which would be obtained over the broad scope of compositions covered by the claims. *In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983) (concluding that unexpected results "limited to sodium only" were not commensurate in scope with claims to a catalyst having "an alkali metal").

Accordingly, based on the totality of the appeal record, including due consideration of Appellants' arguments and evidence, we determine that the preponderance of the evidence weighs most heavily in favor of obviousness of the subject matter recited in claims 2–8, 10–17, 19, 38, and 39 within the meaning of 35 U.S.C. § 103(a).

DECISION

For the above reasons, the Examiner's rejections of claims 2–8, 10–17, 19, 38, and 39 are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED